GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA

UNSTARRED QUESTION NO:4379
ANSWERED ON:25.04.2005
RAISING OF WATER LEVEL IN STATES
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Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Government has conducted any survey to recharge the ground water level in the States by using the rain water harvesting technique; and

(b) if so, the details thereof alongwith action taken thereon, State-wise?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV)

(a) Based on hydrogeological surveys conducted in various parts of the country, Central Ground Water Board (CGWB), under the Ministry of Water Resources, have evaluated the need for artificial recharging of ground water in various selected areas and have prepared a report namely, "Master Plan for Artificial Recharge to Ground Water" for different States by using rain water harvesting and various artificial recharge techniques.

(b) State-wise details of feasible artificial recharge structures as envisaged in the Master Plan are given in Annexure.

The Master Plan outlines broad framework about feasibility of these recharge structures in various parts of the country. It is a conceptual document. "Water" being a State subject, it is primarily the responsibility of the concerned State Governments to formulate plans for augmenting water resources. However, the following steps have been taken by the Union Government to encourage rain water harvesting:-

(i) CGWB has proposed a scheme at an estimated cost of Rs. 175 crores for Artificial Recharge to Ground Water and Rain Water Harvesting during the remaining part of the X Five Year Plan.

(ii) Circulation of Manual/Guidelines on Artificial Recharge of Ground Water to the States/Union Territories to enable them to formulate area specific artificial recharge schemes to check the declining trend of ground water levels.

(iii) Central Ministries/Departments of Railways, Defence, Posts, Telecommunications, Central Public Works Department and National Highways Authority of India have been requested to provide roof top rain water harvesting structures in the buildings under their control.

(iv) States/UTs have been requested to provide water harvesting structures in buildings under their administrative control.

(v) All the States/Union Territories have been requested for advising the local bodies in their respective States/Union Territories to allow rebate in property tax to persons, who adopt roof top rainwater harvesting in their premises.

(vi) CGWB has provided technical guidance on rain water harvesting to around 1800 agencies, including State Government agencies, educational institutions, private entrepreneurs and individuals.

(vii) Launching of a website on Roof Top Rain Water Harvesting (www.cgwb.net) to make aware and educate the public about various techniques of harvesting rainwater and store it for future use.

(viii) Organisation of mass awareness programmes and training courses on rainwater harvesting and artificial recharge of ground water.

(ix) Rain Water Harvesting campaign has been launched keeping in view the various target groups like youth and children, women, farmers and villagers, policy and opinion makers. Publicity through print media, telecasting of spots on the television, broadcasting

messages on radio, holding of seminars, workshops, conferences etc., have been undertaken for the purpose.

(x) The Ministry of Urban Development & Poverty Alleviation, Government of India have amended Building Bye-laws, 1983, making provision for water harvesting through storing of water run-off including rain water in all new buildings on plots of 100 square meters and above in Delhi mandatory. Similarly, State Governments of Tamil Nadu, Andhra Pradesh, Gujarat, Haryana, Rajasthan and Kerala have made roof top rain water harvesting mandatory in specified cases.

ANNEXURE

(REFERENCE LOK SABHA UNSTARRED QUESTION NO. 4379 DATED 25.04.2005)

STATE-WISE DETAILS OF FEASIBLE ARTIFICIAL RECHARGE STRUCTURES AS ENVISAGED IN THE "MASTER PLAN FOR ARTIFICIAL RECHARGE TO GROUNDWATER" PREPARED BY CGWB

Sl.No.	Name of State/UT	Area Identified for Artificial Recharge (sq. km.)	Quantity of Surface Water to be Recharged (in MCM)	Type and Number of Artificial Recharge Structures
1	Andhra Pradesh	65333	1095	3800 Percolation Tanks 11167 Check Dams Rain Water Harvesting in Urban Area.
2	Bihar & Jharkhand	4082	1120	2695 Percolation Tanks 9483 Nala Bunds 1303 Contour Bunds 1630 Recharge Shafts
3	Chhattisgarh	11706	258	648 Percolation Tank 2151 Nala Bunds / Cement Plug / Check dam 2582 Gravity Head / Recharge shafts 7740 Gully plugs, Gabion structures
4	Delhi	693	444	23 Percolation tanks 23 Existing dug wells 10 Nala Bunds 19216 Lateral trench with recharge wells 2496 Roof top rain water harvesting
5	Goa	3701	529	1410 check dam / KT weirs 10,000 Roof top rain water structure
6	Gujarat	64264	1408	4942 Percolation Tanks with Recharge Tubewell 13210 Check Dams Rainwater Harvesting (4.5 lakh houses)
7	Haryana	16120	685	15928 Recharge Shafts and Recharge Trenches Roof Top Rain Water Harvesting (1.7 lakh houses)
8	Himachal Pradesh	-	149	1000 Sub surface dykes 500 Check dams 300 Revival of Ponds 500 Revival of spring 2000 Roof top harvesting structures
9	Jammu & Kashmir	-	161	1500 Sub surface dykes 336 Revival of Kandi Ponds Roof top harvesting (1.5 lakh houses)
10	Karnataka	36710	2065	1040 Sub Surface Dams 5160 Percolation Tanks/ Desilting of old Tanks 17182 Check Dams 8.3 lakh roof top rain water harvesting with Filter Bed.
11	Kerala	4650	1078	4312 check dam 7181 sub surface dykes 10780 gully plugs 10780 nalah Bunds Rooftop rainwater harvesting (0.7 lakh houses)
12	Madhya Pradesh	36335	2320	5302 Percolation Tanks 20198 Nala Bunds/ Cement Plug/ Check Dams 23181Gravity Head/ Dug wells/ Tubewells/ Runoff water harvesting (1200 structures)

Recharge Shafts
69598 Gully Plugs, Gabian Structures.
13 Maharashtra 65267 2318 8108 Percolation Tanks
16598 Cement Plugs
2300 Recharge Shafts, Urban schemes of Roof
Top Rain Water Harvesting (8.78 lakh houses)
3500 Run off Harvesting
14 Arunachal Pradesh - - 500 Check dams
1000 Weirs
1000 Gabian Structures
480 Roof top harvesting
300 Development of Spring
15 Assam - - 250 Check dams
500 Weirs
1000 Gabian Structures
600 Roof top harvesting
250 Development of Spring
16 Manipur - - 300 Check dams
500 Weirs
500 Gabian Structures
300 Roof top harvesting
150 Development of Spring
17 Meghalaya - - 300 Check dams
600 Weirs
600 Gabian Structures
300 Roof top harvesting
200 Development of Spring
18 Mizoram - - 500 Check dams
1000 Weirs
1000 Gabian Structures
300 Roof top harvesting
200 Development of Spring
19 Nagaland - - 500 Check dams
1000 Weirs
1000 Gabian Structures
300 Roof top harvesting
200 Development of Spring
20 Tripura - - 300 Check dams
500 Weirs
1000 Gabian Structures
240 Roof top harvesting
100 Development of Spring
21 Punjab 22750 1200 40030 Recharge shafts and Recharge Trenches
12800 Roof Top Harvesting
structures in Urban Areas

22 Rajasthan 39120 861 3228 Percolation Tanks
1291 Anicuts
2871 Recharge shafts
Rooftop Rainwater Harvesting
structure (4 lakh houses)
23 Sikkim - 44 2100 Spring Development
2500 Cement Plugs/ Nala Bunds
5300 Gabian Structures
69597 Roof Water Harvesting
24 Tamil Nadu 17292 3597 8612 Percolation Ponds
18170 Check Dams
5 lakh rain water harvesting structures
25 U.P. & Uttaranchal 45180 14022 4410 Percolation Tanks
12600 Cement Plugs (Check Dams)
2,12,700 Recharge Shafts
Roof top rain water harvesting
structures (10 lakh)
26 West Bengal 7500 2664 11200 Percolation Tanks with shaft
3606 Gabian structure
1054 Nala Bund/ Cement Plug
1680 Re-excavation of tanks
500 Desiltation of village pond
1000 Spring Development
70 Sub Surface Dykes.

1500 Roof Top Harvesting for
Calcutta & Darjeeling

27 A & Nicobar Islands - 3 145 Spring Development
270 Cement Plugs
38 Percolation Tanks
150 Sub surface dykes
2600 Roof Top Harvesting

28	Chandigarh	33	26	597	Recharge shafts, recharge trenches, check dams and Gabian structures.
29	Dadra & Nagar Haveli			50	check dams / cement plugs
				58	Sub surface dykes
				1000	houses rain water harvesting
30	Daman & Diu			100	Nala bund/check dams
				2000	roof top rain water harvesting structures
31	Lakshadweep			1000	roof top rain water harvesting structures
32	Pondicherry	-	-	5	Percolation Tanks
				14	Recharge pit
				20	Check Dams
				40	Desilting of ponds
				10	Nala bund
				20	Desilting/Recharge wells.
					Rainwater harvesting 10,000 houses